CLAIMS

1. A nozzle arrangement for an inkjet printhead, the nozzle arrangement including:

(a) a nozzle chamber for holding ink;

(b) an actuator in fluid communication with the nozzle chamber, the actuator being moveable with respect to the nozzle chamber upon actuation;

(c) a fluid ejection port in fluid communication with the nozzle chamber for allowing ejection of ink upon movement of an operative portion of the actuator relative to the nozzle chamber during actuation, the fluid ejection port defining an ejection axis generally perpendicular to a plane within which the fluid ejection port is disposed; and

(d) an inlet channel in fluid communication with the nozzle chamber for supplying ink thereto from an ink supply;

wherein the inlet channel is positioned for supplying ink to refill the nozzle chamber at a position radially displaced from the ejection axis.

2. A nozzle arrangement according to claim 1, wherein the inlet channel is orientated such that the ink enters the nozzle chamber along an inlet axis that is substantially parallel to, but displaced from, the ejection axis.

3. A nozzle arrangement according to claim 1, wherein the fluid ejection port is formed in a roof portion that at least partially defines the nozzle chamber, the nozzle arrangement being configured such that, upon actuation, an operative portion of the actuator is moved relative to the fluid ejection port, thereby causing the ink to be ejected from the fluid ejection port.

4. A nozzle arrangement according to claim 1, in which:

at least part of the operative portion of the actuator defines a roof portion that at least partially defines the nozzle chamber; and

the fluid ejection port is formed in the roof portion;

wherein the nozzle arrangement is configured such that, upon actuation, the roof portion, and thereby the fluid ejection port, are moved relative to the nozzle chamber, thereby causing the ink to be ejected from the fluid ejection port.

5. A nozzle arrangement according to claim 1, configured such that, upon return of the actuator to a quiescent position after actuation and ejection of the ink through the fluid ejection port, the nozzle chamber is refilled with ink via the inlet channel.

6. A nozzle arrangement according to claim 5, wherein the nozzle chamber is refilled with ink from the inlet channel due to a reduction in pressure within the nozzle chamber caused by surface tension of a concave ink meniscus across the fluid ejection port after ink ejection.

7. A nozzle arrangement according to claim 1, wherein the actuator is a thermal actuator.

8. A nozzle arrangement according to claim 7, wherein the actuator comprises at least one passive anchor and at least one active anchor, wherein the active anchor is resistively heatable by means of an electric current to cause thermal expansion relative to the passive anchor.

9. A nozzle arrangement according to claim 1, wherein the actuator is moveable within a plane upon actuation, the plane intersecting and being parallel with the ejection axis.

10. A nozzle arrangement according to claim 9, wherein the actuator is mounted to flex about an anchor point upon actuation.

11. A nozzle arrangement according to claim 10, wherein the inlet channel is located in a plane that is parallel to both the inlet channel axis and the ejection axis and which intersects both axes.

12. A nozzle arrangement according to claim 1, further including a raised rib formation disposed on a floor or wall of the nozzle chamber adjacent the inlet channel, for impeding backflow of ink during the actuation.

13. A nozzle arrangement according to claim 12, wherein the rib formation at least partially encircles the inlet channel.

14. A nozzle arrangement according to claim 13, wherein the rib formation comprises a collar that encircles the inlet channel.

15. A nozzle arrangement according to claim 14, wherein the rib formation comprises a radially inward-extending lip.

16. A nozzle arrangement according to claim 1, wherein the actuator is rotatably moved about a pivot region upon actuation and the inlet channel is disposed closer to the pivot region than to the ejection port.